UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D C 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO |
|---|---|---|---|
| | | | |

EXAMINER

| ART UNIT | PAPER NUMBER |
|---|---|
| | 12 |

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined. ☒ Responsive to communication filed on 8/6/99 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire three month(s), none days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449.
4. ☐ Notice of informal Patent Application, Form PTO-152.
5. ☐ Information on How to Effect Drawing Changes, PTO-1474.
6. ☐ _____

**Part II SUMMARY OF ACTION**

1. ☒ Claim(s) 1-52 are pending in the application.
   Of the above, claim(s) 7-42 are withdrawn from consideration.
2. Claim(s) _____ has been canceled.
3. Claim(s) _____ is allowed.
4. Claim(s) 1-6 and 43-52 are rejected.
5. Claim(s) _____ is objected to.
6. Claim(s) 7-42 are subject to restriction or election requirement.
7. This application has been filed with informal drawing(s) under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. Formal drawing(s) are required in response to this Office action.
9. The corrected or substitute drawings have been received on 8/6/99. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. The proposed drawing correction(s), filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under 35 USC 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. Other

EXAMINER'S ACTION

PTOL-326 (Rev. 11-94)

Application/Control Number: 08/932,238

Art Unit: 2878

This is in response to Applicants' amendment filed August 6, 1999.

Due to a typo- error occurred in the previous Final Office Action dated 8/25/99, paper no. 12, in which the numeral reference of claims 43-52 being left out in the heading of the prior art rejection, the finality set forth in the above identified Office Action and also the Advisory Action set forth in the paper no. 14, dated 12/9/99 are hereby rescinded. Examiner regret any inconvenience which may has been caused by these actions.

Claims 1-6 and 43-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 13; claim 43, line 10; and claim 52, line 9, "such" is indefinite.

In claims 46 and 49, the antecedent basis of "said corresponding light receiving element" on line 2, respectively, is unclear. It appears that "light receiving element" should be changed to "light receiving elements". Clarification and correction are required.

Claims 2-6, 44, 45, 47, 48, 50 and 51 are indefinite because they include the indefiniteness of the claims on which they depend.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 43-46, 48-50 and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Funada et al 5,101,099 or the Applicants admitted prior art (Specification pages 7-10 and Fig. 1-6B).

Funada et al disclose an image reading device comprising an image sensor portion (100) having a plurality of light receiving elements (121,122) arranged regularly facing a document (400) to be read out: and a thin film light source (20,241,242,243,244) arranged closely contacted on the document side for emitting light to the document, wherein the light source includes a plurality of light emission portions (243) each having a light emission area (245) smaller than each receiving portion of the light receiving elements (Figures 9 and 11), and opaque electrodes (244) function as a light blocking layer. There at least one light emission portion (243) with the light emission area (245) is substantially centered and aligned with respect to the corresponding light receiving element 121. The light blocking layer is positioned between the document and the light receiving elements. The

Applicants admitted prior art also disclose an image sensor device comprising a plurality of light receiving elements (1612) arranged regularly facing a document (1690) to be read out; and a thin film light source (1620) arranged closely contacted on the document side for emitting light to the document, wherein the light source includes a transparent electrode (1622), a light emission layer (1623), a plurality of light emission windows or light emission portions (1625), and an opaque electrode (1625). The opaque electrode includes a plurality of openings forming light emission portions and light blocking portions with each emission portion having an area smaller than each light receiving portion of the light receiving elements, wherein at least one of the light emission portions is substantially centered and aligned with the corresponding light receiving element (Figures 5-6B). The opaque electrode is disposed between the light receiving elements and the document.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4-6, 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada et al 5,101,099 or the Applicants admitted prior art (Specification pages 7-10 and Figures 1-6B).

Regarding claims 2, 4, 47 and 51, although Funada et al and/or the prior art fail to disclose an organic thin film (insulating layers) with separate organic thin film areas held between the transparent and opaque electrodes, the selection of a prefer material for component(s) of a device

would have been a mere matter of obvious design choice to one of ordinary skill in the art, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. The similar selection of the image sensor being cited in claim 4 would have been obvious for similar reasons set forth above.

Regarding claim 5, although Funada et al and/or the prior art fail to specify the colors of light emitted from the light source, using a light source with light of different colors to maximize responsivity of the receiving elements would have been obvious in the art. It would have been obvious to modify Funada et al or the admitted prior art accordingly in order to provide a more reliable reading output from the receiving elements.

Regarding claim 6, although Funada et al and/or the admitted prior art fail to disclose an optical fiber collection member provided between the light source and the document, the use of optical fiber for conducting light in an image sensor is known in the art. It would have been obvious to modify Funada et al or the admitted prior art accordingly in order to minimize possible spurious response from unwanted light.

Applicant's arguments filed August 6, 1999 have been fully considered but they are not persuasive.

With respect to Applicants' arguments, on page 8 of the remarks, regarding the feature of at least one light emission portion being substantially aligned with the corresponding light receiving

element, it is noted that: Funada reference, at least Figure 4 shows that at least one light emission window or light emission portion 206 is substantially aligned with the corresponding light receiving element 101a (column 8, lines 2-3; and the Applicants' admitted prior art, Figure 3 shows that light being emitted from at least one light emission portions (fibers 1301) and at least one end of the fibers 1301 is substantially aligned with the corresponding light receiving element 1306. Similarly, at least one light emission portion or light emission window 1504, shows in Figure 4, is substantially aligned with the corresponding light receiving element 1502.

Accordingly, the rejection set forth above is proper.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.E.P.. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Le whose telephone number is (703) 308-4830.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Le8.18